

In the Specification

At page 2, lines 12-28, please amend the paragraph as follows:

The bundling of twisted pairs arises either out of necessity (for example, the existing telephone loop infrastructure) or because of the benefits of improved performance (for example, 1000-BaseT Ethernet). In either case however, communications in these setting suffer from interference arising from electromagnetic coupling between neighboring pairs, referred to as “crosstalk” interference. This means that any signal received by a modem at the end of a twisted pair generally contains not only the transmitted signal of the specific pair (which itself is likely distorted to some extent), but also distorted signals transmitted on neighboring pairs. It is apparent, therefore, that the transmission characteristics of a specific pair (for example, the pair’s transmitted power) can materially influence communication on a neighboring pair due to induced crosstalk. Therefore, transmissions on neighboring pairs (especially those belong to a bundle or sharing the same binder) are coupled in certain ways. The interfering signals are commonly treated as noise. However crosstalk can be identified in some situations. (See United States Serial No. 09/788,267, now U.S. Patent No. 6,990,196 which is incorporated herein by reference.) If crosstalk coupling function can be identified, it may be possible to remove the crosstalk interference.

At page 17, lines 23-31, please amend the paragraph as follows:

In some embodiments of the present invention, information is shared regarding the line characteristics of all links. One example may be found in United States Serial No. 09/788,267, now U.S. Patent No. 6,990,196 which is incorporated herein by reference. Line characteristics can include, but are not limited to, loop topology, transfer functions and crosstalk coupling functions. For example, knowledge of crosstalk coupling can allow performance improvements, since the amount of degradation of a link due to transmission on a neighboring link can be accurately estimated, and thus it may be realized than an increase in the transmitted power will improve the performance of the link without degrading the neighboring link.